

Environmental Justice

Guidance from the federal government on environmental justice ensures planning decisions are based on an understanding of communities that have been historically burdened by environmental hazards. Lebanon County, especially the City of Lebanon, includes disadvantaged communities and will need direct outreach and resources to equitably meet the transportation needs of these residents.

State and federal governments have long been committed to Environmental Justice (EJ), ensuring that those who are most at risk from the burdens associated with environmental impacts from transportation infrastructure have a voice in the planning and decision-making process for their communities. In 2021, the federal government reinforced this commitment to EJ through the Justice40 initiative, which aims to ensure equitable distribution of benefits by channeling 40 percent of the overall federal investments to disadvantaged communities. This initiative will help address the legacy of underinvestment and invest in communities that have been historically overburdened by negative transportation-related environmental impacts.

The White House Council on Environmental Quality (CEQ) created the Climate and Economic Justice Screening Tool, which identifies nine categories of burden to identify these disadvantaged communities. Communities are considered disadvantaged if they are in a census tract with one or more of the following characteristics:³

1. **Income:** The census tract is at or above the 50th percentile for low income.
2. **Climate Change:** The census tract is at or above the 90th percentile for expected agriculture loss rate OR expected building loss rate OR expected population loss rate OR projected flood risk OR projected wildfire risk.
3. **Energy:** The census tract is at or above the 90th percentile for energy cost OR PM2.5 (particulate matter) in the air.
4. **Health:** The census tract is at or above the 90th percentile for asthma OR diabetes OR heart disease OR low life expectancy.
5. **Housing:** The census tract has experienced historic underinvestment OR is at or above the 90th percentile for housing cost OR lacks green space OR lacks indoor plumbing OR lead paint is present.
6. **Legacy Pollution:** The census tract has at least one abandoned mine OR Formerly Used Defense Site OR is at or above the 90th percentile for proximity to hazardous waste facilities OR proximity to Superfund sites (National Priorities List (NPL)) OR proximity to Risk Management Plan (RMP) facilities.
7. **Transportation:** The census tract is at or above the 90th percentile for diesel particulate matter exposure OR transportation barriers OR traffic proximity and volume.
8. **Water and Wastewater:** The census tract is at or above the 90th percentile for underground storage tanks and releases OR wastewater discharge.
9. **Workforce Development:** The census tract is at or above the 90th percentile for linguistic isolation or low median income OR poverty OR unemployment AND more than 10 percent of people ages 25 years or older do not have a high school diploma.

³United States Environmental Protection Agency, CEJST Mapping Tool (2024 version), EJScreen, retrieved: March 2024 from <https://screeningtool.geoplatform.gov/en/methodology#4.1/27.42/-95.75>

In addition, the US Department of Transportation (USDOT) released the Equitable Transportation Community (ETC) Explorer, a complement to the CEQ's screening tool. This tool identifies communities that have been burdened by underinvestment in transportation. This ensures that USDOT investments are addressing the transportation-related causes of disadvantage. The tool identifies the following components as contributing to transportation disadvantage⁴:

1. **Transportation Insecurity:** Measures of peoples' abilities to get where they need to go to meet the needs of their daily life regularly, reliably, and safely.
2. **Climate and Disaster Risk Burden:** Measures of sea level rise, changes in precipitation, extreme weather, and heat, which pose risks to the transportation system.
3. **Environmental Burden:** Measures of pollution, hazardous facility exposure, water pollution, and the built environment.
4. **Health Vulnerability:** Health effects from exposure to air, noise, and water pollution, as well as lifestyle factors such as poor walkability, car dependency, and long commute times.
5. **Social Vulnerability:** Measure of socioeconomic indicators that have a direct impact on quality of life (lack of employment, educational attainment, poverty, housing tenure).

Additionally, Lebanon County's PPP identifies the specific needs of Plain Sect members, noting the "unique transportation and land use issues that need to be factored into the overall planning for any community within which they live and work."

The following figures map the factors affecting social vulnerability and workforce development in Lebanon County. Low-income populations identified for Lebanon County are shown below in Figure 6. Low-income populations are defined by the FHWA for transportation planning purposes as families of four with a household income that is below the poverty guidelines set by the HHS. The 2023 HHS poverty guideline for a family of four is \$30,000. In Lebanon County, several areas were identified with elevated percentages of households falling into this category. Median household incomes are lowest in Lebanon, Palmyra, and Myerstown. The 2023 American Community Survey estimates 10.8 percent of all people in Lebanon County are living below the poverty level. In addition, the high share of the population without a high school diploma or a GED, as shown in Figure 7, makes it challenging to develop a workforce with higher paying jobs.

⁴ USDOT Equitable Transportation Community (ETC) Explorer, retrieved March 2024, <https://experience.arcgis.com/experience/0920984aa80a4362b8778d779b090723/page/ETC-Explorer---Homepage/>

Figure 6 – Median Household Income by Census Tract (2021)

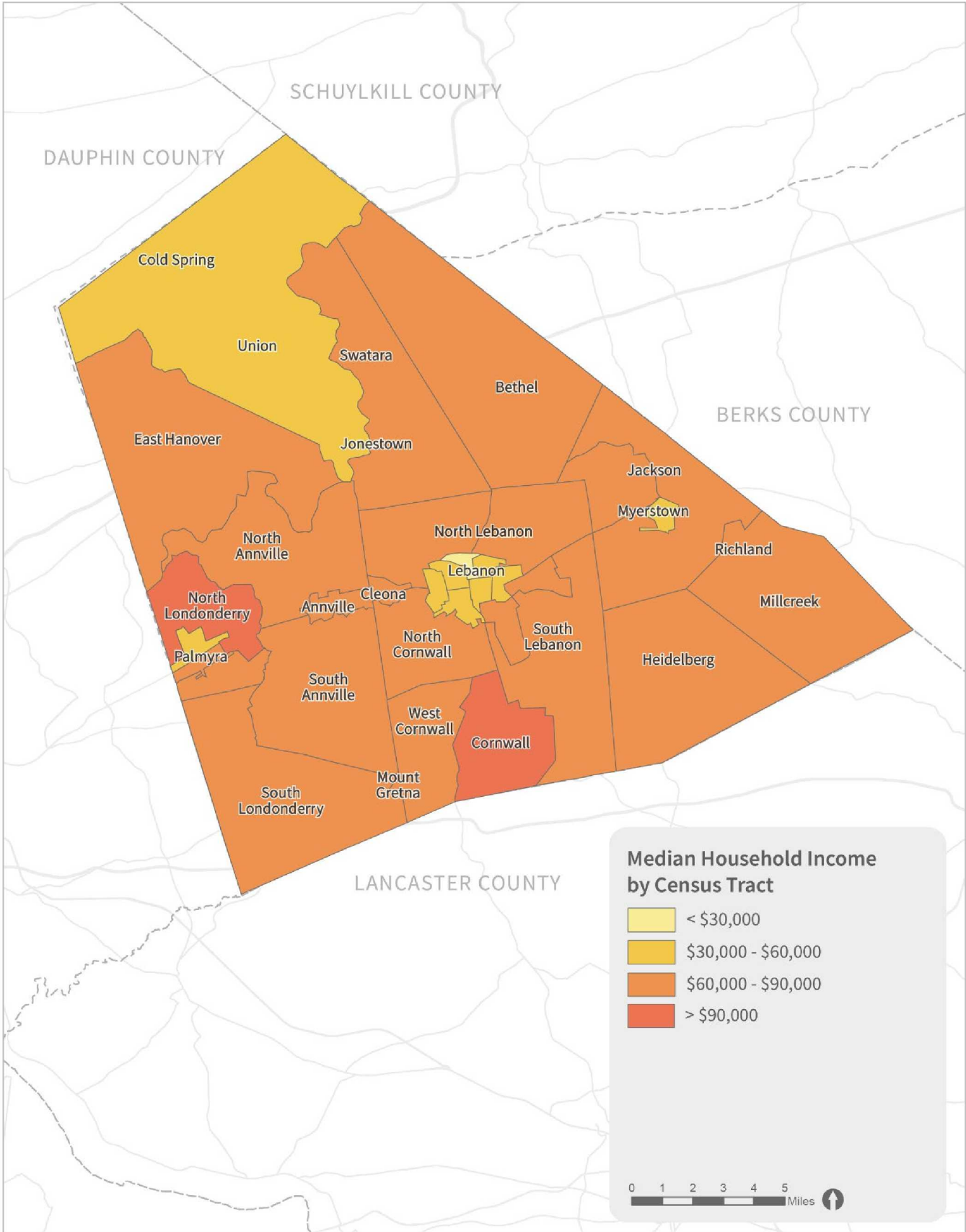


Figure 7 - High School Educational Attainment by Census Tract

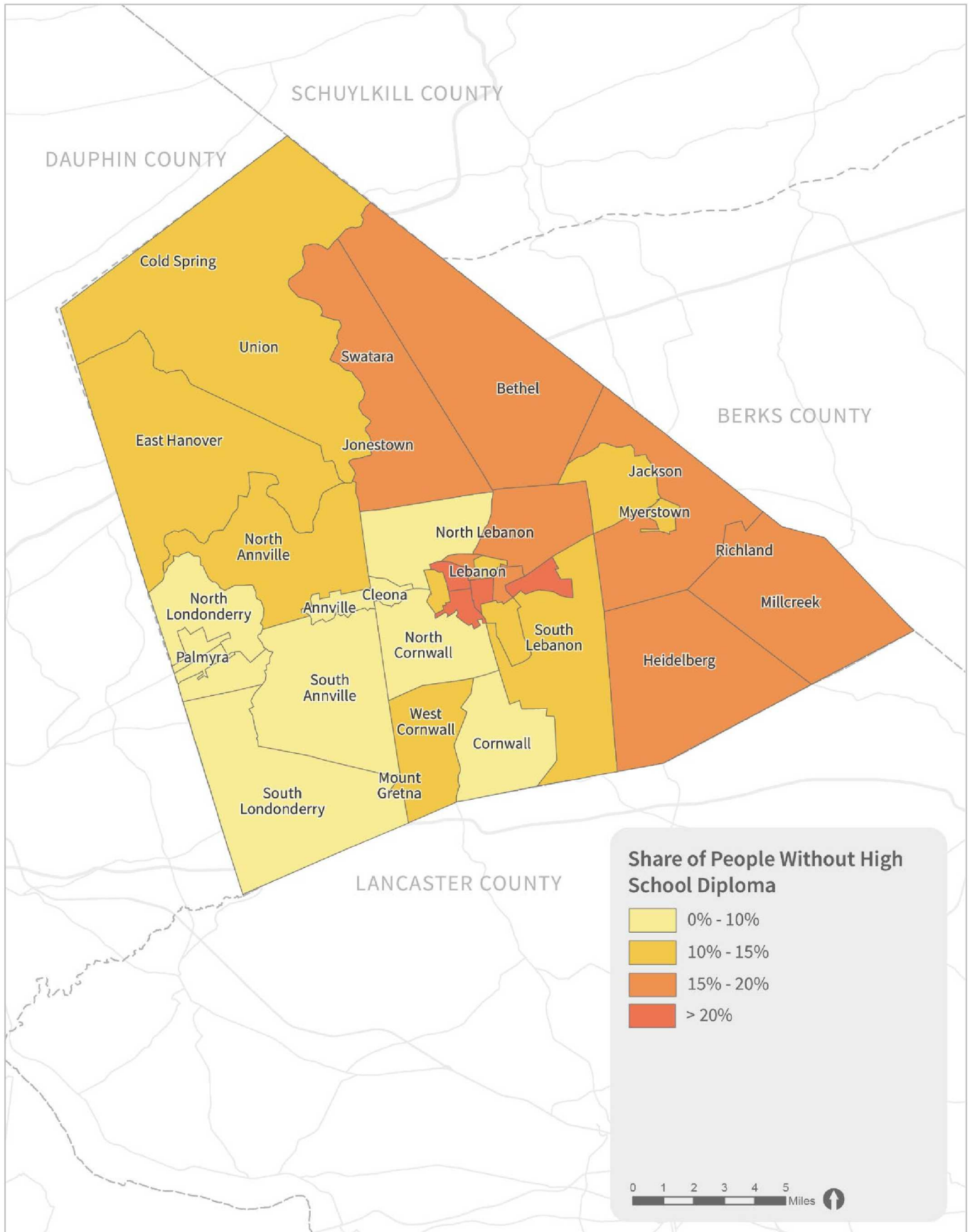


Figure 8 - Share of Households with Limited English Proficiency

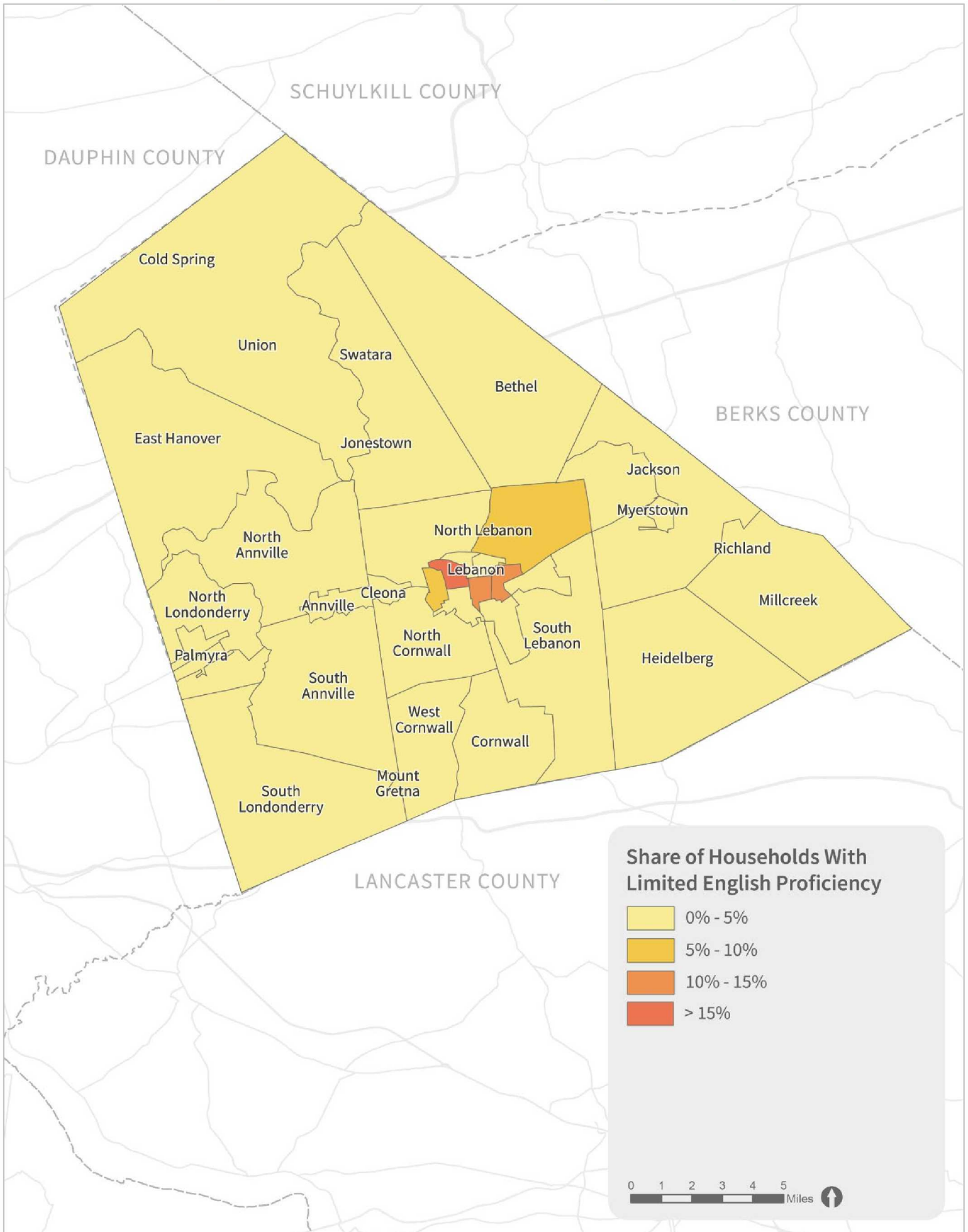


Table 3 – Racial and Ethnic Composition

Race	% of Lebanon County Population (2012)	% of Lebanon County Population (2021)	% Change (2012 - 2021)	% of PA Population (2012)	% of PA Population (2021)	% Change (2012 - 2021)
White	89.4%	84.3%	-3.1%	81.9%	78.3%	-3.6%
Black or African American	1.9%	2.2%	+0.3%	11.0%	11.0%	0.0%
American Indian/Alaskan Native	0.1%	0.1%	0.0%	0.2%	0.2%	0.0%
Asian	1.0%	1.5%	+0.5%	2.9%	3.6%	+0.7%
Native Hawaiian or Other Pacific Islander	0.0%	0.1%	+0.1%	0.1%	0.1%	0.0%
Two or More Races	2.5%	8.9%	+6.4%	2.1%	7.0%	+4.9%
Hispanic or Latino	9.4%	14.1%	+4.7%	6.1%	7.9%	+1.8%
White alone, not Hispanic or Latino	86.7%	80.0%	-6.7%	78.6%	74.9%	-3.7%

Source: U.S. Census Bureau, American Community Survey, 2012 & 2021

The share of households in the City of Lebanon experiencing linguistic isolation corresponds to the growing share of residents who identify as Hispanic or Latino, as shown in Table 3. Based on input from census data and the Lebanon County Planning Department, the majority of the Hispanic population in Lebanon County resides in the City of Lebanon (see Figure 8). Therefore, the project team ensured that the outreach programs were distributed widely in Spanish.

Benefits and Burdens Analysis

USDOT’s Equitable Transportation Community (ETC) Explorer was used to identify disadvantaged communities to determine the benefits and burdens of programmed transportation investments identified on the TIP and TYP. The data and maps shown in Figure 9 and Figure 10 were evaluated to identify potential adverse impacts or notable positive benefits for each programmed project. Most projects on the LEBCO TIP and TYP are asset-management-focused efforts that address bridge or pavement rehabilitation or replacement needs that involve little or no right-of-way impacts. TIP and TYP projects that are located within disadvantaged communities are summarized in Table 4. An analysis of these projects has determined there would be no disproportionate burdens on disadvantaged communities and, in many cases, the projects would result in a benefit to these communities.